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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,930	12/04/2006	David Platt	89918.021302	7979

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EXAMINER

BLAND, LAYLA D

ART UNIT	PAPER NUMBER
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1623

NOTIFICATION DATE	DELIVERY MODE
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11/30/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/597,930	Applicant(s) PLATT ET AL.	
	Examiner Layla Bland	Art Unit 1623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/11/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/11/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This application is a national stage entry of International Application No. PCT/US05/04430, filed February 14, 2005, which claims priority to US Provisional Application No. 60/544,402, filed February 13, 2004. Claims 1-15 are pending in this application and are examined on the merits herein.

Claim Objections

Claims 2 and 3 are objected to because of the following informalities: "chitan" is a misspelling in claim 2 and "N-acetylglucoseamine" is a misspelling in claim 3. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

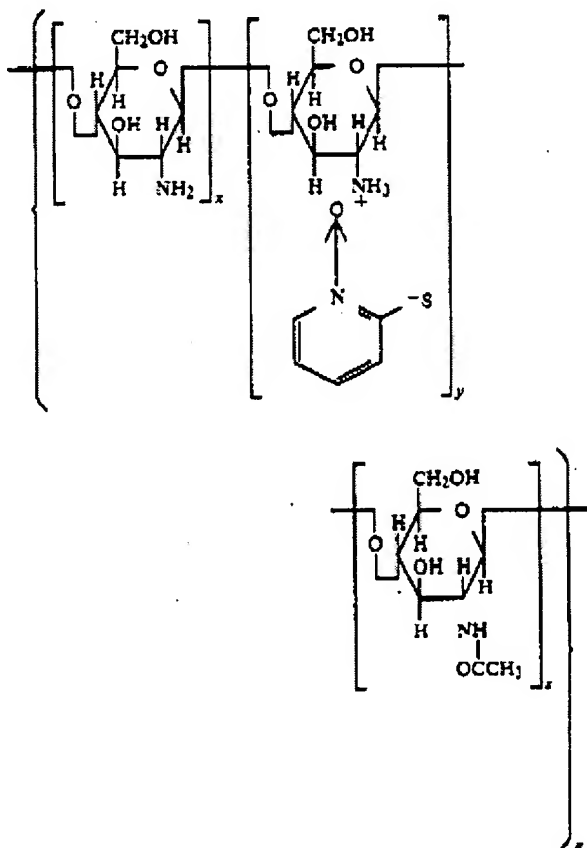
Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Nelson (US 5,015,632, May 14, 1991).

Nelson teaches a chitosan pyrithione salt which is useful as an antimicrobial agent in soaps, shampoos, and skin care medicaments [see abstract]. Chitosan has fungicidal and wound-healing activity and pyrithione salts have antibacterial and antifungal activity [column 1, lines 17-26]. In the chitosan pyrithione salt, shown below,

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x, y and z are independently 0.01-0.98 and n is 700-10,000 [column 1, lines 35-68].

The molecular weight is between 150,000-600,000.



Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson (US 5,015,632, May 14, 1991).

Nelson teaches as set forth above.

Nelson does not teach compositions comprising decyl polyglucose and does not teach methods of treating dermatological conditions.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include decyl polyglucose in a skin care composition. Decyl glucose is a surfactant commonly used in personal care products; thus, it would have been obvious to include it in the compositions taught by Nelson, which are taught to be useful as soaps, shampoos, and skin medicaments.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to treat a dermatological condition such as acne or candida using the composition taught by Nelson. Nelson teaches the antimicrobial and antifungal activity of the compositions [columns 4 and 5, Tables 1 and 2] and teaches that the compositions are useful as skin medicaments that are absorbed slowly into the skin [column 1, lines 24-26]. One of ordinary skill in the art could find the optimal concentrations for treating various skin conditions via routine experimentation.

Claims 6, 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson (US 5,015,632, May 14, 1991) in view of Platt (US 5,891,861, April 6, 1999) and Yaku et al. (US 4,970,150, November 13, 1990).

Nelson teaches as set forth above.

Nelson does not teach a composition wherein n (corresponds to N in claims 6 and 15) is between 1 and 100.

Platt teaches that oligomeric materials comprised of linked repeat units of beta glucosamine, having molecular weight 4,000-18,000 are highly effective in killing and/or restricting the growth of a variety of fungal organisms, especially yeasts [column 2, lines 21-29]. The material was obtained by hydrolysis of chitosan [column 4, lines 36-40].

Yaku et al. teach that glucosamine oligosaccharides prepared by reducing the molecular weight of chitosan has antibacterial properties and low toxicity [column 1, lines 26-29]. Low molecular weight chitosan can be prepared by art-recognized methods [column 1, lines 30-49]. In one embodiment, the molecular weight was 11,000 [column 4, Example 2].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the chitosan used in the composition taught by Nelson with chitosan oligomers (those having ~10-100 units). Nelson's composition is antibacterial and antifungal, and chitosan oligomers are also known to be effective antibacterials and antifungals. The skilled artisan could have combined the teachings and would have been able to predict that the resulting composition would be antibacterial and antifungal, and useful for treating dermatological conditions.

A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill in the art might reasonably infer from the teachings. (*In re Opprecht* 12 USPQ 2d 1235, 1236 (Fed Cir. 1989); *In re Bode* 193 USPQ 12 (CCPA)

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1976). In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a). From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Layla Bland whose telephone number is (571) 272-9572. The examiner can normally be reached on M-R 8:00AM-5:00PM UST.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia Anna Jiang can be reached on (571) 272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Layla Bland
Patent Examiner
Art Unit 1623
November 17, 2007

Shaojia Anna Jiang


Supervisory Patent Examiner
Art Unit 1623
November 17, 2007